Army Medical Specialist Corps

United States Army

MUSCULOSKELETAL CONCERNS IN DEPLOYMENT

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OUTLINE

- LTC Crunkhorn: Introduction
- CPT Kushner: OIF1
- CPT Jovag: Deployment Preparation
- LTC Crunkhorn: Lessons Learned and Recommendations
- Questions

Theater NBI Evacuations

Reasons for NBI Evac:

- Orthopedic 2,110 65.7%
  - » Ortho 369
  - » 33% due to sprains, strains
- Surgical 1,095 34.1%
  - » Neurosurgery 114
  - » 57% due to backache or back disorders

Non Battle Injury

- Traumatic
  - Approximately 40%
  - Relatively Uncontrollable
- Overuse Injuries
  - Approximately 60%
  - Controllable

Physical Therapy Statistics

21st CSH

- **ACTIVE DUTY 55%**
- **NATIONAL GUARD 18%**
- **RESERVE 18%**
- **EPW 4%**
- **CIVILIAN/IRAQI 3%**
- **CONTRACTOR 2%**

47th CSH

- **ARMY NATIONAL GUARD 49% AND RESERVE**
- **ARMY ACTIVE DUTY 31%**
- **USMC 11%**
- **USAF 4%**
- **ALLIED 3%**
- **OTHER 2%**

Physical Therapy Visits

21st CSH:

- **3,138**
  - **1 PT**
  - **1 91WN9**
  - **77% RTD rate**

47th CSH:

- **1,213**
  - **1 PT**
  - **2 91WN9s**

PT Evaluations

21st CSH: *27% pre existent*

- 16% Knee
- 15% Shoulder/arm
- 15% Low Back
- 14% Wrist/hand/finger
- 15% Ankle/Foot/toe
- 7% Cervical
- 6% Leg
- 5% Hip/pelvis
- 4% Elbow

47th CSH: *31% pre existent*

- 23% Foot and Ankle
- 22% Low Back
- 18% Knee
- 11% Shoulder
- 11% Other
- 6% Thoracic
- 5% Elbow/wrist/hand
- 4% Cervical

Deployment Environment

- Demands on soldiers
  - 35 # body armor, kevlar, LBV, and ruck
  - Terrain features and climate
  - Convoys
    - length of time
    - vehicle type
  - Initial fitness/activity level
- MOS not necessarily accurate indicator of duty

Stryker Brigade

- Pre-Deployment Screenings
- Unit Level
  - Early screenings give time to react
  - Sick Call
  - Early identification and treatment of musculoskeletal problems

SRP

- Soldier Readiness Program
  - 1st Corps Directed
  - BG Dunn: screen 100% of deploying soldiers
- # of Soldiers SRP'd NOV-now = 12,290 (OIF)
- # of Soldiers seen by PT (SRP) NOV-now = 550
- HRA2
- Data Collection

81st Armor

- Broad range of ages
  - No skew towards older population
- Broad range of conditions
  - Low back pain, knee pain, shoulder pain
  - Common complaint of too quick ramp up in training

81st Armor

- 83 Ortho REFRAD Soldiers (159 total)
- 290 Soldiers evaluated in PT
  - 412 PT visits
- Impact of 25 Day Rule
  - Must be able deploy “as is”
    - did not engage in care
  - Acute, acute on chronic and chronic conditions
  - Lesson learned: show up to the medical SRP physically prepared to *train and deploy*

Demobilizing Soldiers

- Up to 50% of demobilizing soldiers seen in Physical Therapy
- Seen for acute, acute on chronic and chronic conditions
  - Typical complaints are CLBP, AKP
  - Pnts relate uneven terrain, gravel, boots, constant wear of gear, and posture in vehicles as MOI

Recommendations

- Stress physical fitness: Core stabilization, strength, endurance, flexibility and aerobic
- Gradual buildup of physical training and equipment wear
  - Work Hardening
  - Wearing the Flak Vest and Kevlar Weight

Recommendations

- Early Screening
  - Pre Existing Injuries
  - Chronic Problems
- Consideration of deployability with P2/3 profiles
  - Track P2 and P3 profiles before and during deployment

QUESTIONS?